



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,667	11/13/2001	Masaaki Shibuya	OOCL-73 (US-P1535)	5240
26479	7590	10/06/2003	EXAMINER	
STRAUB & POKOTYLO 620 TINTON AVENUE BLDG. B, 2ND FLOOR TINTON FALLS, NJ 07724			TRAN, HUAN HUU	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

FILE COPY

## Office Action Summary

Application No.

10/054,667

Applicant(s)

SHIBUYA, MASAOKI

Examiner

Huan H. Tran

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 and 12-19 is/are allowed.
- 6) ☒ Claim(s) 1-3.6 and 10 is/are rejected.
- 7) ☒ Claim(s) 4.5 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers.

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2861

**DETAILED ACTION**

**Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claim 3 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite for lack of recitation in the claim of structure to support the functional limitation "said thermal head is pre-heated by conducting a current to the load". Perhaps the claim should be amended to recite that the pre-heating is performed by the control means. See In re MASON, 114 USPQ 127 (CCPA 1957) (Functional statement cannot serve to distinguish claims, which are not process claims, from reference since it does not define any structure); In re DALTON AND COOLEY, 89 USPQ 271 (CCPA 1951) (In order for claims drawn to define structure to be patentable, they must depend upon novel structure set out; properties, functions, uses, and results that may appear from defined structure are not definitions of it and may not be solely relied upon to make claim containing them patentable unless there is positive setting out of structure itself in claims which must be responsible for properties, functions, uses, and results thereof.)

**Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipatd by Negishi et al. (US Patent No. 6095700).

Art Unit: 2861

With respect to claim 1, Negishi et al. discloses a printer comprising:  
a thermal head (154) for transferring a plurality of color inks successively to paper so that a color image can be printed on the paper according to image data;

battery power supply means (64);

voltage detecting means (CPU 70) for detecting a voltage developed from said battery power supply means; and

control means (CPU 70) for feeding power supplied from said battery power supply means to a load at the timing immediately preceding the transfer of the color inks to the paper, instructing said voltage detecting means to detect the voltage developed from said battery power supply means at the predetermined timing immediately succeeding the feeding of power, and performing correction according to the result of the detection so that a printing density of inks transferred from said thermal head will remain constant irrespective of whether the voltage developed from said battery power supply is high or low.

With respect to claim 2, in Negishi et al. the load is said thermal head.

With respect to claim 6, Negishi et al. teaches the limitation that said control means performs correction by changing a conduction time during which a current is conducted to said thermal head.

With respect to claim 10, Negishi et al. also discloses a color printer and the correction is performed for all the transfers of different colors.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Negishi et al. in view of Inui et al. (US Patent NO.4449137).

Negishi et al. discloses the claimed invention for the reasons stated above except that it does not teach that the thermal head is pre-heated by conducting a current to the head.

However it is submitted that the concept of pre-heating a head is well known in the art as evidenced by Inui et al.

Art Unit: 2861

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to pre-heat the printhead in Negishi et al. as taught by Inui et al. to prevent recording density deterioration.

**Allowable Subject Matter**

8. Claims 4-5, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


9. Claims 7-9, 12-19 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: Prior art of record do not teach or suggest the invention as recited in the above-identified claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (703) 308-0749. The examiner can normally be reached on M-F with Monday off, from 7:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Fuller can be reached on (703) 308-0079. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1749.

  
Huan H. Tran  
Primary Examiner  
Art Unit 2861

hht

9/27/08